Illinois Commerce Commission
111(d) Policy Session 2

Building Block 3: Clean Generation

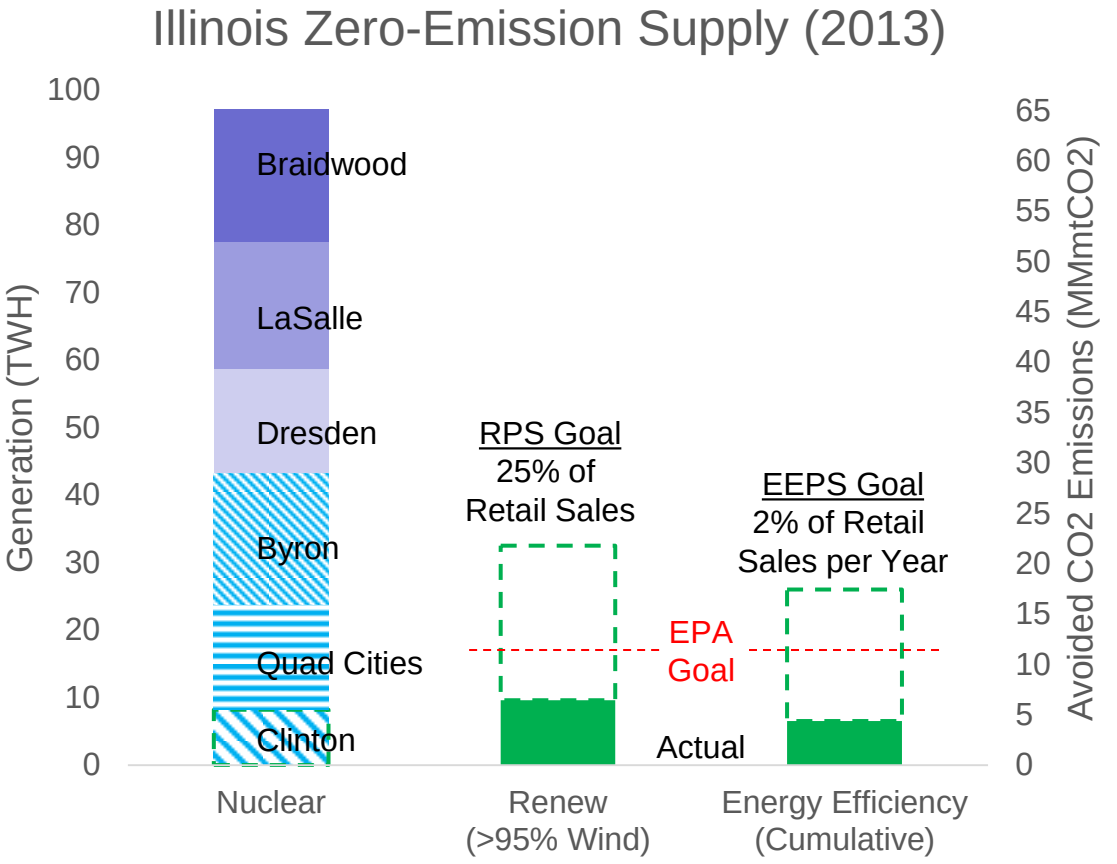
Kathleen Barrón
Senior Vice President
Federal Regulatory Affairs and Wholesale Market Policy

September 23, 2014

Exelon

Illinois Nuclear

- Nuclear retirements in Illinois have the potential to increase overall CO2 emissions in the US by roughly 65 million metric tons of CO2 per year, far more than the CO2 abatement from the very ambitious renewables and energy efficiency programs currently being pursued in Illinois.

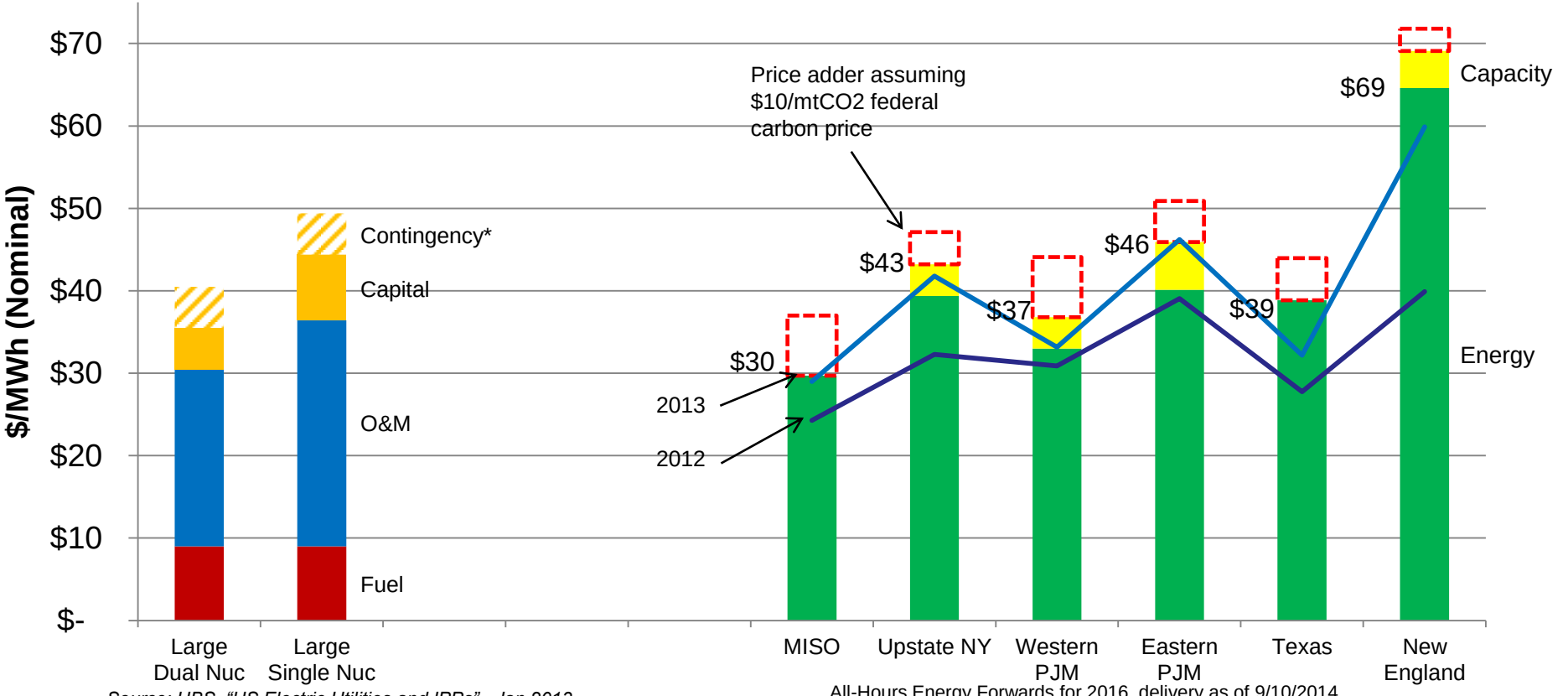


Note: Replacement generation is assumed to have an emission intensity of roughly 1475 lbs/MWH based on the EIA AEO2013 regional average. Avoided emission forecasts may be higher or lower depending on the replacement assumptions.

Nuclear Economics

- In the preamble, EPA states that “nuclear units may be experiencing up to a $6/MWH shortfall in covering their operating costs with electricity sales.” This can be corroborated by an analysis of nuclear cost estimates and historic/forward electricity prices.
- A relatively modest carbon price (equivalent to roughly $6/MWH) would preserve much existing merchant nuclear capacity that is currently unprofitable and at risk of premature retirement.

2016 Forecast



Source: UBS, “US Electric Utilities and IPPs” , Jan 2013
Source: Credit Suisse, “Nuclear…The Middle Age Dilemma” , Feb 2013
**Contingency does not include return on investment*

All-Hours Energy Forwards for 2016 delivery as of 9/10/2014, MISO basis is assumed (90% of NiHub). NY capacity forecast equals 2013 rest-of-state.